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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,377	03/14/2001	Richard Wyatt	36-1567	1527

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EXAMINER
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NGO, HUNG NHAT

ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 01/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/805,377

Applicant(s)

WYATT ET AL.

Examiner

Hung N Ngo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6 and 8-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 10, 11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohtsuki et al (WO 9946835).

Ohtsuki et al discloses plurality of mode field radius transformers (421,433) disposed in an array (Fig. 10), being arranged in use, so that each mode field transformer is connectable or spliceable with a respective system fibre (13,15,17) in which at a given wavelength the mode field radius of an optical signal is  $x$ , each mode field radius transformer being arranged to increase the mode field radius of the optical signal, with respect to  $x$ , so that the power density of said optical signal in the mode field transformer is reduced to a level below the threshold required for optical power induced damage to propagate within the mode field transformer (see Abstract, Figs.9 and 10).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6, 8, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohtsuki et al (WO 9946835).

Ohtsuki et al discloses an optical communication system including an optical communications route comprising system fibre (13,15,17) having a given mode field

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radius at an operating wavelength of the system, an optical route component (16,23,44,45) for performing a function within the optical system, the optical route component forming part of the optical communications route and being connected to the system fibre or a laser pigtail fibre, the output of the optical route component passing through a mode field transformer (421,433) and along the system fibre, the mode transformer including a section of optical fibre (Fig. 9), the optical system being operated with an optical power density in the system fibre above a level at which optical power induced damage can propagate in the system fibre, the mode transformer reducing the optical power density for said given power level such that within the mode transformer the power density is reduced below the threshold level, so that in the event that optical power induced damage occurs in the system fibre downstream of the mode transformer is prevented from propagating into the optical route component (see Abstract).

The section of optical fibre included in the mode converter includes a waist portion, wherein the diameter or cross sectional area of the waist portion is smaller than the diameter or cross sectional area of the system fibre or fibre pigtail (see Fig. 9).

The waist portion is symmetrically disposed about the longitudinal axis of the section of optical fibre included in the mode converter (Fig. 9).

Choosing fiber length is well known in the art to accommodate the length of the transmission system; therefore, choosing a system fiber at least 100 meters in length would be obvious design choice for accommodate the length of the system.


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It is also well known in the art to enclose optical router in a seal container to protect the router from being damaged by the environment and to secure the router with other optical components (see Yui et al). Therefore, it would have been obvious to one skill in the art to enclose the optical router of Ohtsuki et al in a seal container to protect and secure the router.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung N Ngo whose telephone number is (703) 308-0297. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 703-305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
Hung N Ngo  
Primary Examiner  
Art Unit 2633

hn